

102

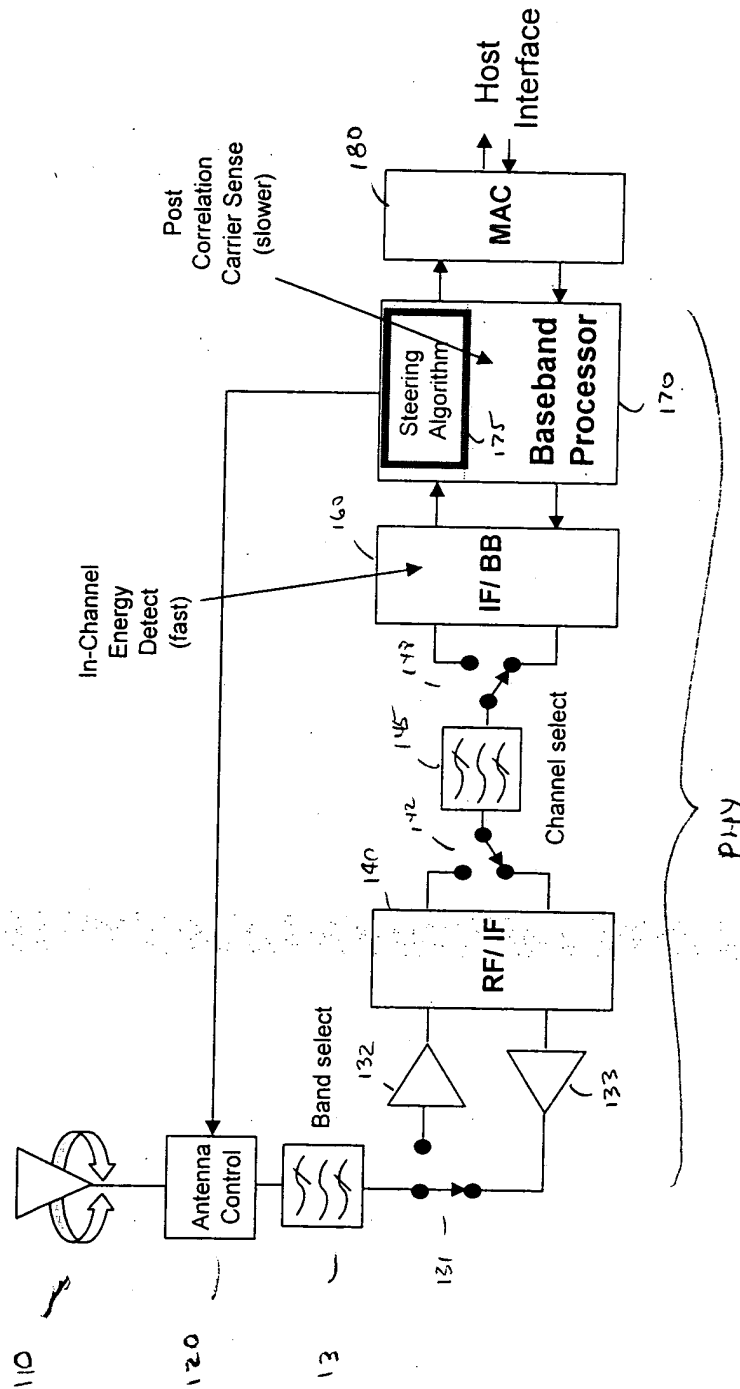


Fig. 1

PPDU Frame 200

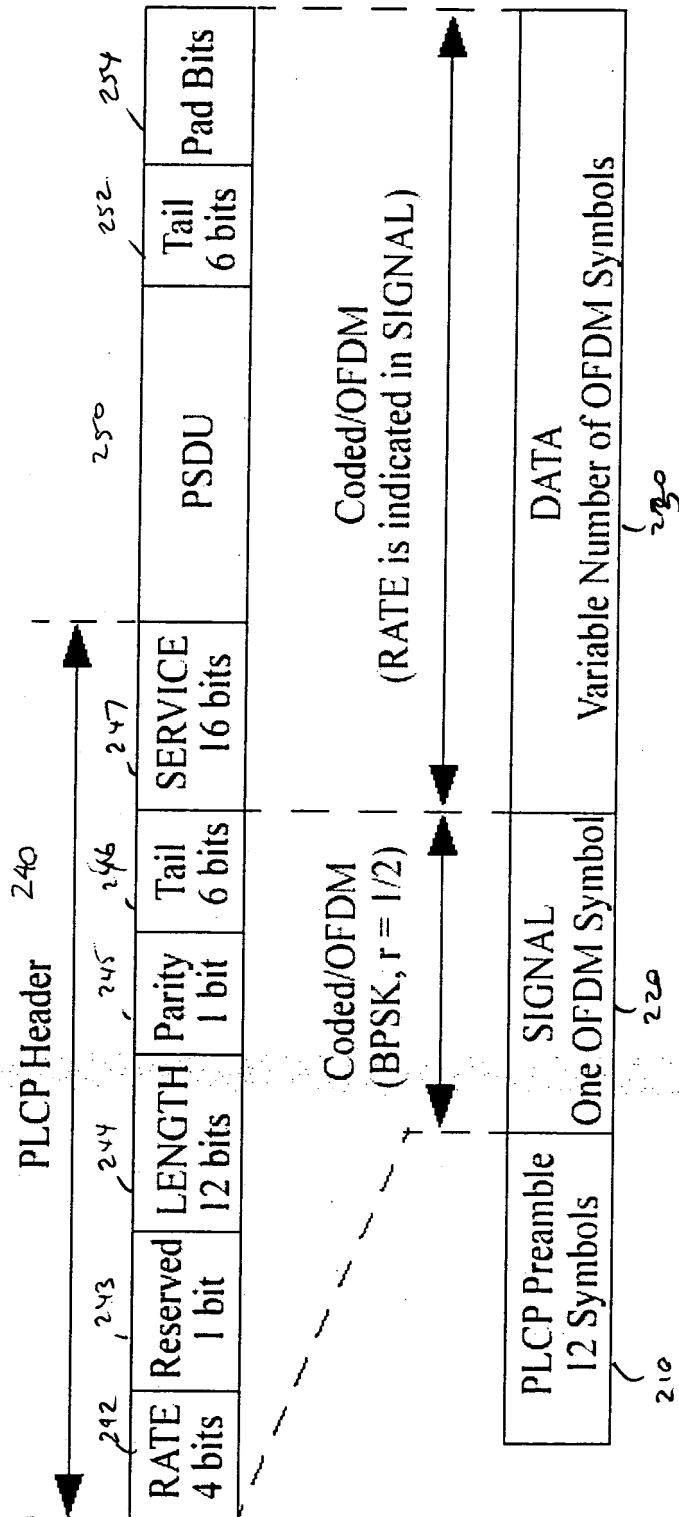


Fig. 2

PLCP Preamble 210

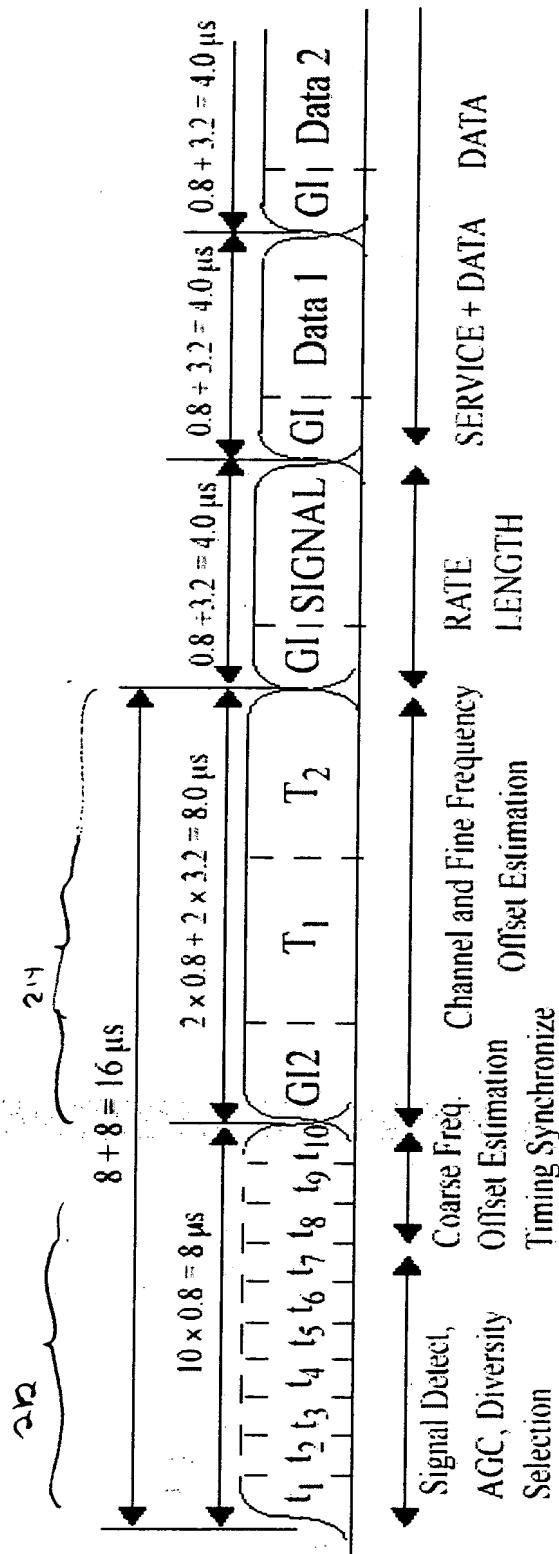


Fig. 3

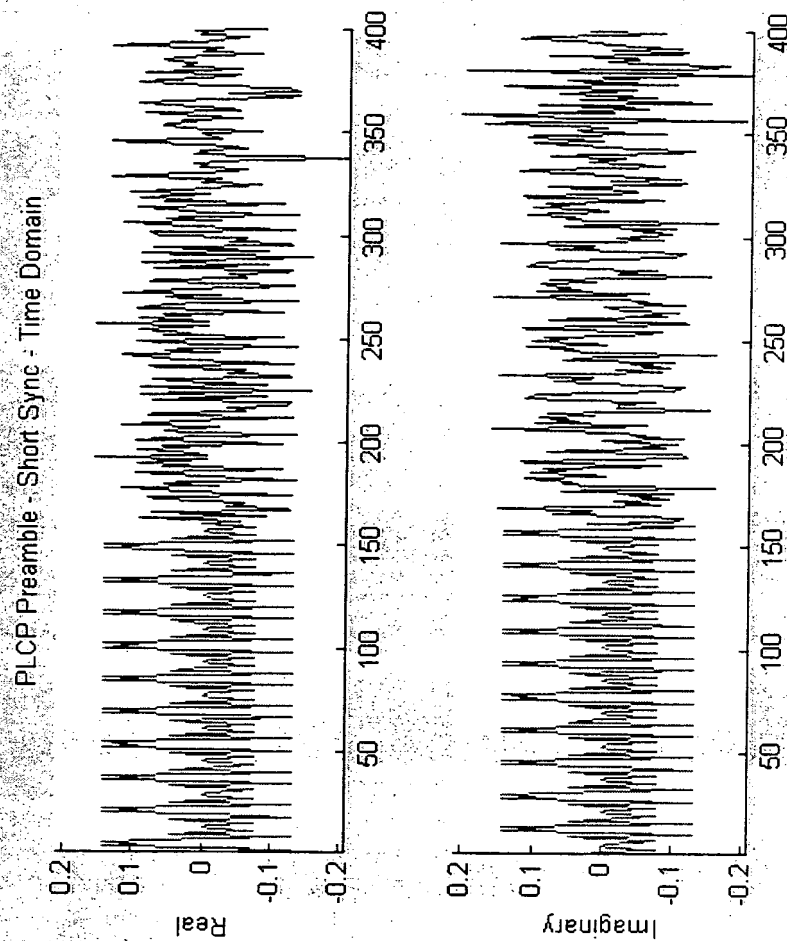


Fig. 4

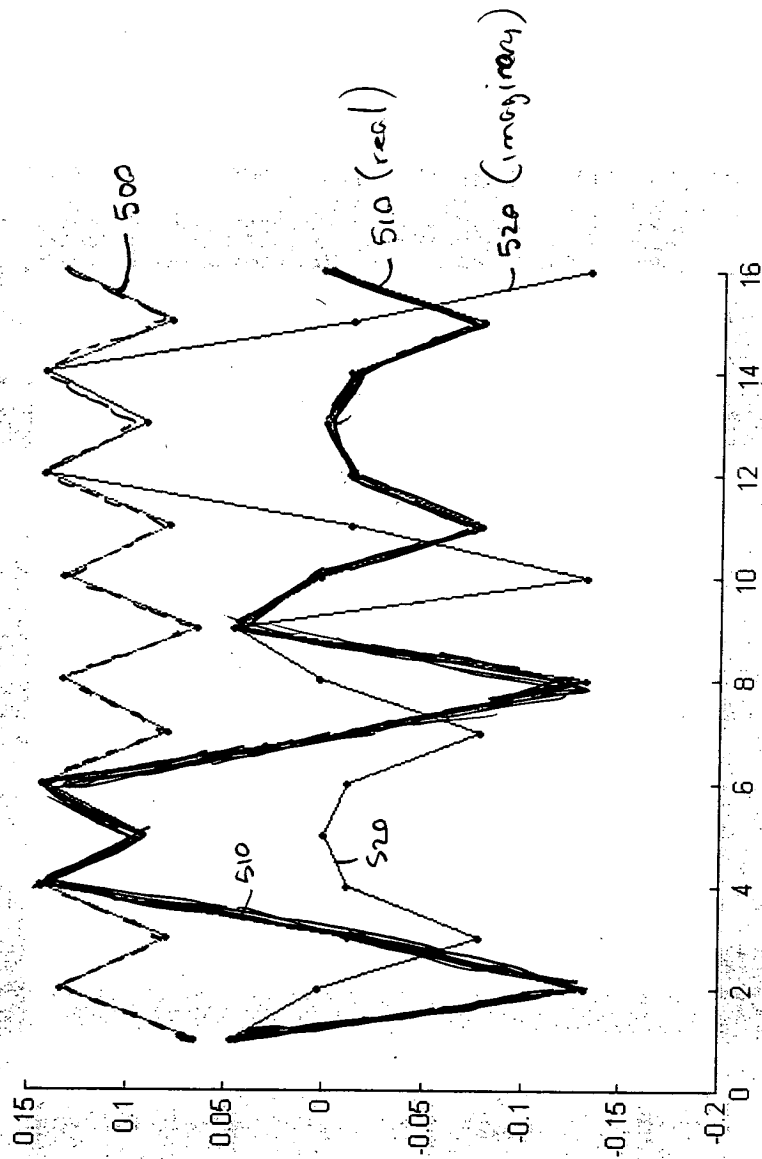


Fig. 5

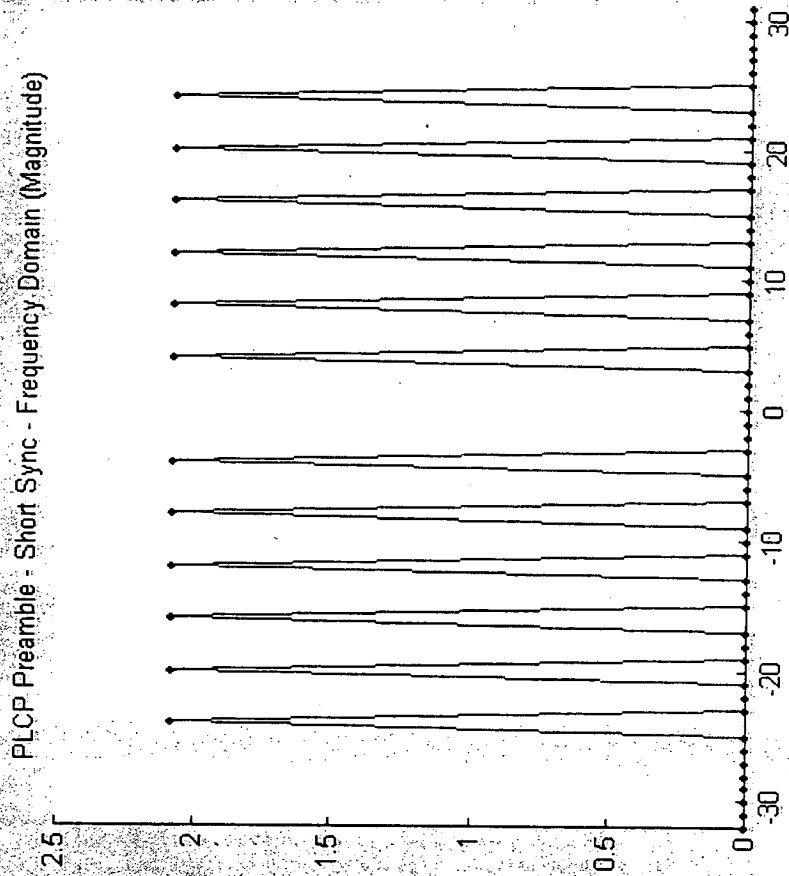


Fig. 6

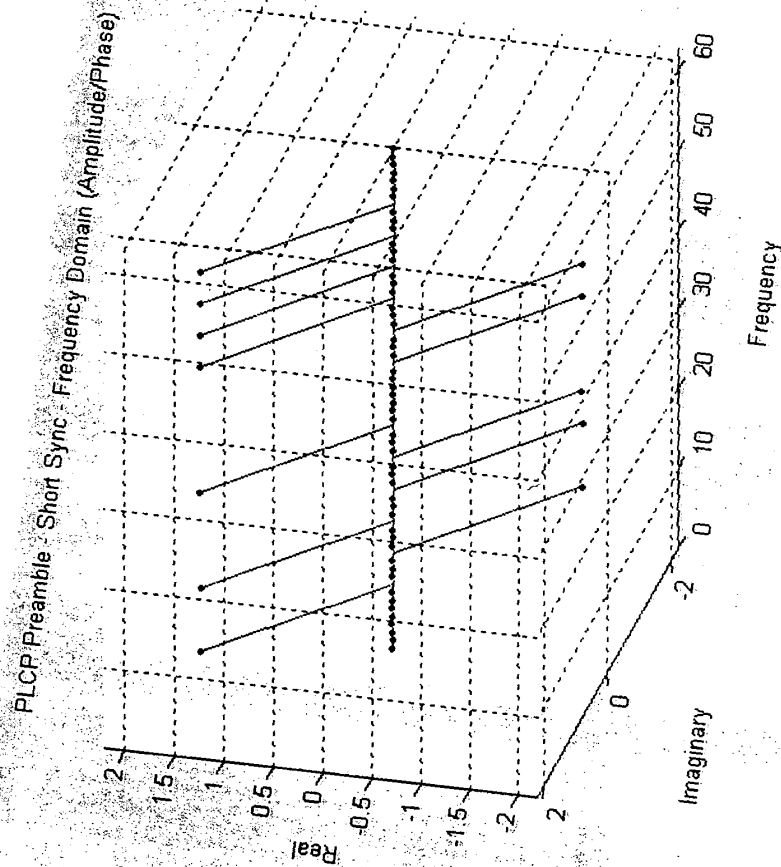
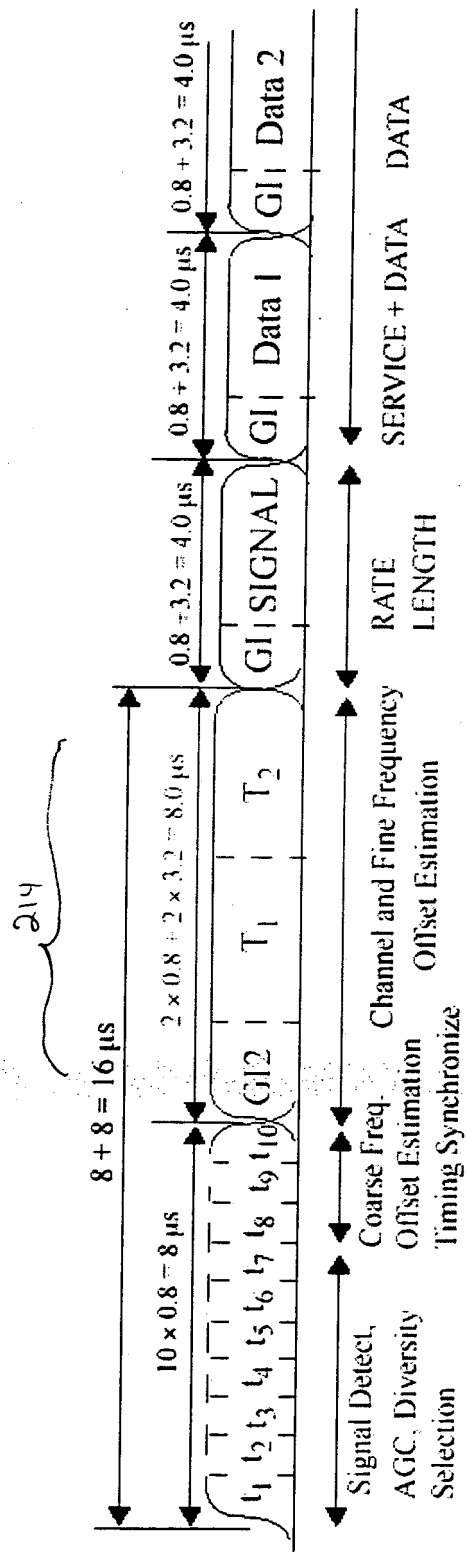


Fig. 7



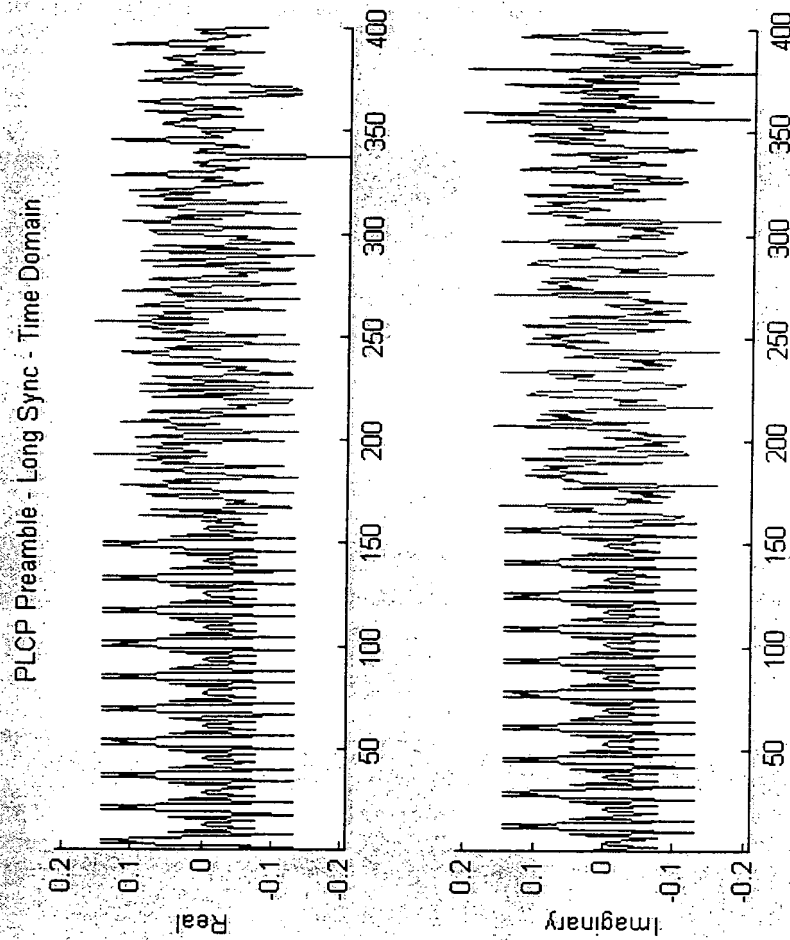


Fig. 9

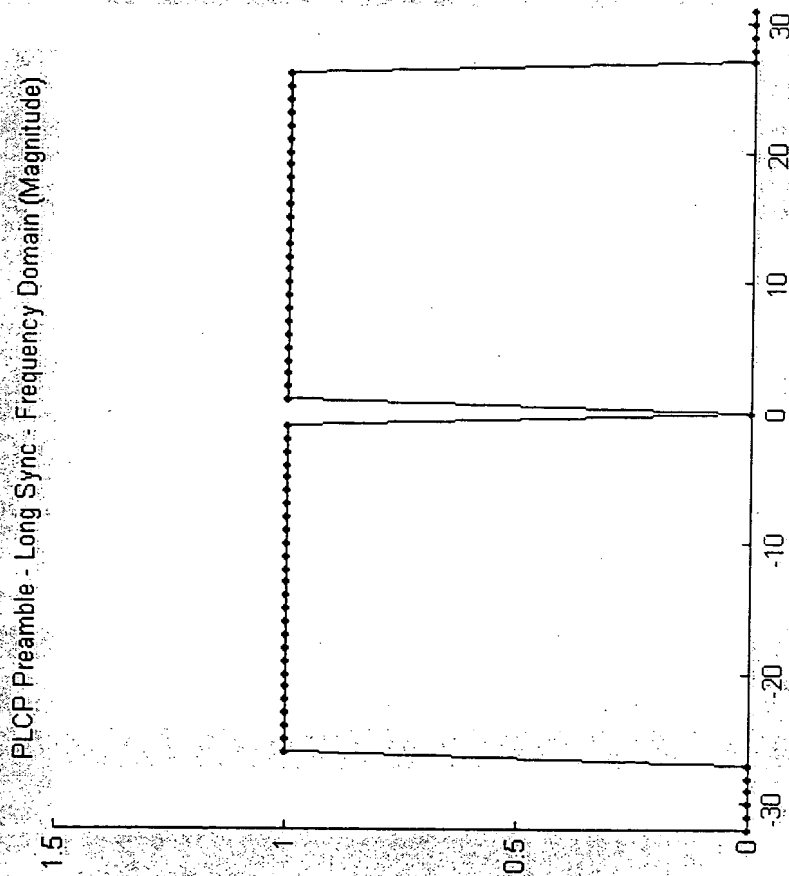


Fig. 10

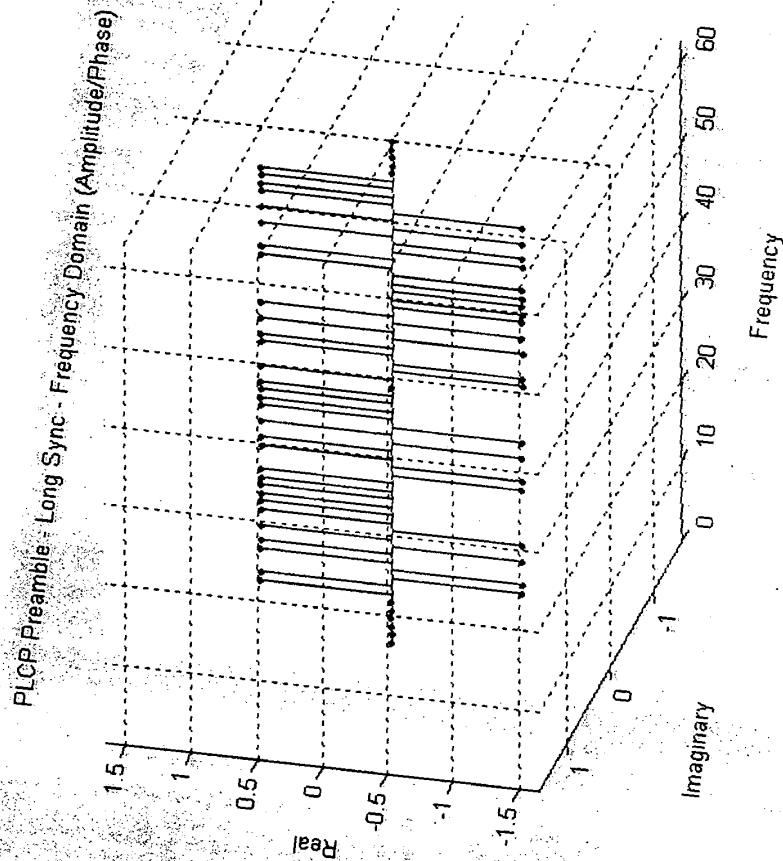


Fig. 11

1200 Configure the array for omni mode
1210 Let the AGC track for one short sync (800 nS)
1220 Lock the AGC and back it off 6 dB
1230 Correlate over first half of a short sync (400 nS)
1240 Correlate over second half of a short sync (400 nS)
1242 - Swap real and imaginary samples for this
1250 Configure the array for angle 1 of 4
1260 Repeat correlations over
1270 · select best candidate
1280 · set final antenna direction

Fig. 12

- 1300 Set antenna in omni for the first short sync
- 1310 Store the first half short sync and use as reference
- 1312 — It contains all multipath distortions
- 1315 Correlate half short syncs for each of the four possible angles
- ;
- 1320 select best candidate
- 1330 set first antenna angle

Fig. 13

- 1420 Take the FFT bins of interest from the short sync
- 1410 – Inverse FFT to create the time domain equivalent
- 1420 Take the other bins of non-interest from the short sync
- 1430 – Inverse FFT to create the time domain equivalent
- 1440 Correlate the received waveform against both of these time domain sequences
- 1450 – Establish a pseudo signal to noise ratio as the ratio of the peak of the first correlation over the correlation of the second waveform at the same bin location

Fig. 14